

Please type a plus sign (+) inside this box → +

PTO/SB/08A (10-96)
Approved for use through 10/31/99. OMB 0551-0031
Patent and Trademark Office: U.S. DEPARTMENT OF COMMERCE

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

Substitute for form 1449A/PTO

INFORMATION DISCLOSURE STATEMENT BY APPLICANT

(use as many sheets as necessary)

Sheet **1** of **3**

Complete if Known

Application Number	10/777,205
Filing Date	February 13, 2004
First Named Inventor	Terrance Dean MAXWELL et al.
Group Art Unit	unknown
Examiner Name	unknown
Attorney Docket Number	58029-147



U.S. PATENT DOCUMENTS

Examiner Initials ¹	Cite No. ¹	U.S. Patent Document		Name of Patentee or Applicant of Cited Document	Date of Publication of Cited Document MM-DD-YYYY	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
		Number	Kind Code ² (if known)			
GC		5,034,929		Cobern et. al.	07-23-1991	
		5,307,885		Kuwana et. al.	05-03-1994	
		5,353,884		Misawa et. al.	10-11-1994	
		5,685,379		Barr et. al.	11-11-1997	
		5,706,905		Barr	01-13-1998	
		5,803,185		Barr et. al.	09-08-1998	
		5,875,859		Ikeda et. al.	03-02-1999	
		5,931,239		Schuh	08-03-1999	
		5,139,094		Prevedel et. al.	08-18-1992	
		3,823,787		Haworth et. al.	07-16-1974	
		5,314,030		Peterson	05-24-1994	
		6,244,361		Comeau et. al.	06-12-2001	
		6,158,529		Dorel	12-12-2000	
		3,896,667		Jeter	07-29-1975	
		3,967,680		Jeter	07-06-1976	
		4,655,289		Schoeffler	04-07-1987	
		6,267,185		Mougel et al.	07-31-2001	
		2,210,824		Walker, Sr.	08-06-1940	
		4,428,626		Blau et al.	01-31-1984	
GC		4,459,613		Case	10-20-1985	

FOREIGN PATENT DOCUMENTS

Examiner Initials ¹	Cite No. ¹	Foreign Patent Document			Name of Patentee or Applicant of Cited Document	Date of Publication of Cited Document MM-DD-YYYY	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear	T ⁶
		Office ³	Number ⁴	Kind Code ⁵ (if known)				
GC		GB	2,172,324		Schlumberger Canada	09-17-1986		
		GB	2,172,325		Cambridge Radiation	09-17-1986		
		GB	2,177,738		Cambridge Radiation	01-28-1987		
		WO	90/07625		Cambridge Radiation	07-12-1990		
		WO	90/08245		Cambridge Radiation	07-26-1990		
		GB	2,307,537		Astec Developments	05-28-1997		
		WO	99/24688		Telejet Technologies	05-20-1999		
		EP	0,718,641 A		Baker Hughes Inc.	06-26-1996		
		GB	2,017,191		Haglund	10-03-1979		
GC		CA	2,314,575		Baker Hughes Inc.	01-23-2001		

Examiner
Signature

/Giovanna Collins/

Date
Considered

08/03/2006

¹EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

² Unique citation designation number. ³ See attached Kinds of U.S. Patent Documents. ⁴ Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). ⁵ For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. ⁶ Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST. 16 if possible. ⁷ Applicant is to place a check mark here if English language Translation is attached.

Burden Hour Statement: This form is estimated to take 2.0 hours to complete. Time will vary depending upon the needs of the individual case. Any comments on the amount of time you are required to complete this form should be sent to the Chief Information Officer, Patent and Trademark Office, Washington, DC 20231. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Assistant Commissioner for Patents, Washington, DC 20231.

Please type a plus sign (+) inside this box → +

PTO/SB/08A (10-98)
Approved for use through 10/31/99. OMB 0651-0031
Patent and Trademark Office: U.S. DEPARTMENT OF COMMERCE

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

Substitute for form 1449A/PTO INFORMATION DISCLOSURE STATEMENT BY APPLICANT <i>(use as many sheets as necessary)</i>			Complete if Known		
			Application Number	10/777,205	
			Filing Date	February 13, 2004	
			First Named Inventor	Terrance Dean MAXWELL et al.	
			Group Art Unit	Unknown	
			Examiner Name	Unknown	
			Attorney Docket Number	58029-147	
Sheet	2	of	3		

U.S. PATENT DOCUMENTS						
Examiner Initials ¹	Cite No. ¹	U.S. Patent Document		Name of Patentee or Applicant of Cited Document	Date of Publication of Cited Document MM-DD-YYYY	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
		Number	Kind Code ² (if known)			
GC		5,547,031		Warren et al.	08-20-1996	
		6,158,533		Gillis et al.	12-12-2000	
		6,227,313		Davis et al.	05-08-2001	
		6,244,361		Comeau et al.	06-12-2001	
		6,382,333		Murray	05-07-2002	
		2002/0185314		Cargill et al.	12-12-2002	
		5,758,732		Leiv	06-02-1998	
		6,318,462		Tessier	11-20-2001	
		2002/0053470		Noe et al.	05-09-2002	
		4,314,615		Sodder, Jr. et al.	02-09-1998	
		4,512,422		Knisley	04-23-1985	
		4,612,987		Cheek	09-23-1986	
GC		5,467,834		Hughes et al.	11-21-1995	

FOREIGN PATENT DOCUMENTS								
Examiner Initials ¹	Cite No. ¹	Foreign Patent Document			Name of Patentee or Applicant of Cited Document	Date of Publication of Cited Document MM-DD-YYYY	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear	T ³
		Office ³	Number ⁴	Kind Code ⁵ (if known)				
GC		CA	2,298,375		Schlumberger Canada	09-15-2000		
		GB	2,356,207		McLoughlin	05-16-2001		
		WO	00/65198		McLoughlin	11-02-2000		
GC		WO	01/11191 A1		Vector Magnetics, Inc.	02-15-2001		

Examiner Signature	/Giovanna Collins/	Date Considered	08/03/2006
--------------------	--------------------	-----------------	------------

¹EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

² Unique citation designation number. ³ See attached Kinds of U.S. Patent Documents. ⁴ Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). ⁵ For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. ⁶ Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST. 16 if possible. ⁷ Applicant is to place a check mark here if English language Translation is attached.

Burden Hour Statement: This form is estimated to take 2.0 hours to complete. Time will vary depending upon the needs of the individual case. Any comments on the amount of time you are required to complete this form should be sent to the Chief Information Officer, Patent and Trademark Office, Washington, DC 20231. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Assistant Commissioner for Patents, Washington, DC 20231.

Please type a plus sign (+) inside this box → +

PTO/SB/08B (10-98)
Approved for use through 10/31/99. OMB 0651-0031
Patent and Trademark Office: U.S. DEPARTMENT OF COMMERCE
Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

Substitute for form 1449B/PTO INFORMATION DISCLOSURE STATEMENT BY APPLICANT <i>(use as many sheets as necessary)</i>			Complete if Known		
			Application Number	10/777,205	
			Filing Date	February 13, 2004	
			First Named Inventor	Terrance Dean MAXWELL et al.	
			Group Art Unit	unknown	
			Examiner Name	unknown	
			Attorney Docket Number	58029-147	
Sheet	3	of	3		

OTHER PRIOR ART – NON PATENT LITERATURE DOCUMENTS			
Examiner Initials*	Cite No. ¹	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T ²
GC		Warren T: "Technology Gains Momentum," Oil and Gas Journal, US, Pennwell Publishing Co., Tulsa, Vol. 96, No. 51, December 21, 1998, pp. 101-105.	
		"LoTAD (Trademark), Mechanical Friction- and Wear- Reduction Running String," product description of Weatherford Drilling & Intervention Services website www.weatherford.com , 2 pp.	
GC		"LoTAD (Trademark), product description of Weatherford Drilling & Intervention Services website www.weatherford.com , 2pp.	

Examiner Signature	/Giovanna Collins/	Date Considered	08/03/2006
--------------------	--------------------	-----------------	------------

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

¹ Unique citation designation number. ² Applicant is to place a check mark here if English language Translation is attached.

Burden Hour Statement: This form is estimated to take 2.0 hours to complete. Time will vary depending upon the needs of the individual case. Any comments on the amount of time you are required to complete this form should be sent to the Chief Information Officer, Patent and Trademark Office, Washington, DC 20231. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Assistant Commissioner for Patents, Washington, DC 20231.



Approved for use through 07/31/2006. OMB 0651-0031

U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

Substitute for form 1449/

(Use as many sheets as necessary)

Sheet	1	of	1
-------	---	----	---

Complete if Known

Application Number	10/777,205
Filing Date	February 13, 2004
First Named Inventor	Terrance D. Maxwell
Art Unit	3672
Examiner Name	Unknown
Attorney Docket Number	58029-147

U. S. PATENT DOCUMENTS

[illegible]

FOREIGN PATENT DOCUMENTS

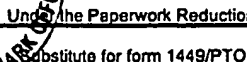
FOREIGN PATENT DOCUMENTS						
Examiner Initials*	Cite No. ¹	Foreign Patent Document	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages Or Relevant Figures Appear	T ^o
		Country Code ² *Number ⁴ *Kind Code ³ (if known)				
GC		CA 1,177,057	10-30-1984	Garrett		
GC		EP 1,371,810 A1	12-17-2003	Halliburton		

Examiner Signature	/Giovanna Collins/	Date Considered	08/03/2006
-----------------------	--------------------	--------------------	------------

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant. ¹Applicant's unique citation designation number (optional). ²See Kinds Codes of USPTO Patent Documents at www.uspto.gov or MPEP 801.04. ³Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). ⁴For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. ⁵Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST.16 if possible. ⁶Applicant is to place a check mark here if English language Translation is attached.

This collection of information is required by 37 CFR 1.97 and 1.98. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 2 hours to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

If you need assistance in completing the form, call 1-800-PTO-9199 (1-800-786-9199) and select option 2.



(Use as many sheets as necessary)

Sheet	1	of	1
-------	---	----	---

Complete if Known

Application Number	10/777,205
Filing Date	February 13, 2004
First Named Inventor	Terrance D. Maxwell
Art Unit	3672
Examiner Name	Unknown
Attorney Docket Number	58029-147

[illegible]

FOREIGN PATENT DOCUMENTS						
Examiner Initials*	Cite No. ¹	Foreign Patent Document	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages Or Relevant Figures Appear	T ^o
		Country Code ³ Number ⁴ Kind Code ⁶ (if known)				
GC		EP 0 452 126 A2	10-16-1991	Halliburton		
GC		WO 98/34003	08-06-1998	Baker Hughes		
GC		EP 0 497 422 A1	08-05-1992	Anadrill		

If you need assistance in completing the form, call 1-800-PTO-9199 (1-800-786-9199) and select option 2.

Approved for use through 07/31/2008. OMB 0851-0031

U.S. Patent and Trademark Office: U.S. DEPARTMENT OF COMMERCE

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

Complete If Known

(Use as many sheets as necessary)

Sheet	1	of	1
-------	---	----	---

Application Number	10/777,205
Filing Date	February 13, 2004
First Named Inventor	Terrance Dean Maxwell et. al.
Art Unit	3672
Examiner Name	Giovanna M. Collins
Attorney Docket Number	58029-147 (now 16463-174)

U. S. PATENT DOCUMENTS

[illegible]

FOREIGN PATENT DOCUMENTS

[illegible]

Examiner Signature	/Giovanna Collins/
-----------------------	--------------------

Date Considered	08/03/2006
-----------------	------------

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 606. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant. *Applicant's unique citation designation number (optional). *See Kinds Code of USPTO Patent Documents at www.uspto.gov or MPEP 901.04. *Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). *For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. *Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST.16 if possible. *Applicant is to place a check mark here if English language translation is attached.

This collection of information is required by 37 CFR 1.97 and 1.98. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 2 hours to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

If you need assistance in completing the form, call 1-800-PTO-9199 (1-800-786-9199) and select option 2.